

**UNIVERSITI TEKNOLOGI MARA**

**ASSESSING THE TRADE AND  
TRANSPORT FACILITATION  
PERFORMANCE: A  
MANUFACTURER'S PERSPECTIVE**

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of the requirements for the degree of  
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## ABSTRACT

Practitioners and academics agreed that logistics performance significantly influence the efficiency and effectiveness of firm performance. This is because the differentiation in values that customers receive from logistics activities would create the firm's competitive advantage. Presently, in the global supply chain network, logistics performance measurements are not only referred to firm performance, but also cover the entire logistics supply chain and trade facilitation. It aims to maximise the efficiency of procedures and control governing the movement of goods across national border. Presently, the Logistics Performance Index (LPI) constructs developed by Arvis et al. (2014) were used to determine the overall performance of Malaysian logistics industry. Additionally, environment-friendly was considered vital due to the fact that minimise the amount of emissions in transport operations (Pazirandeh & Jafari, 2013) as well as productions. Six constructs were assessed by the professionals in manufacturing firms, namely customs efficiency, logistics infrastructure, logistics cost, logistics effectiveness, quality of logistics services and environment-friendly. The assessment was based on 129 usable questionnaires from various industries to assess logistics performance. Further analysis were carried out to determine the effects of the six constructs and logistics performance. The Partial Least Square – Structural Equation Modelling (PLS-SEM) approach was used to identify two main objectives, namely the effect of trade and transport facilitation, and the key constructs from the logistics performance model. The results demonstrate that three key determinant factors i.e. customs efficiency, logistics infrastructure, and competence and quality of logistics services mostly reflect the overall logistics performance in Malaysia. However, logistics cost and environment-friendly were found to have negative effects on logistics performance. Despite these findings, results showed that customs efficiency and logistics infrastructure indirectly affect logistics cost. Thus the results indicated that both custom efficiency and logistics infrastructure have the potential to minimise the logistics cost in Malaysia. This study contributes to the body of knowledge through the establishment of relationship between trade transport facilitation and logistics performance in Malaysia from the manufacturing firms' perspectives. It also provides insight on a different perspective of logistics performance for Malaysia.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 INTRODUCTION**

Logistics performance reflects perceptions of a country's logistics friendliness. This chapter introduces an overview of logistics development in Malaysia. It also presents the overview of Malaysia's logistics industry performance and current information of international trade performance from the manufacturing sector. Next, the development of performance measurement, review of logistics performance, and research problems for the intended study are presented. Subsequently, the research objectives, justification scope of the study, and significance of research are also presented.

### **1.2 BACKGROUND TO THE STUDY**

This section provides an overview of the logistics development followed by the needs of logistics performance measurement.

#### **1.2.1 Logistics Development**

Distribution of farm products in the beginning of 1900s has made logistics began to gain attention from the practitioners. In the late 19<sup>th</sup> century, logistics began to receive increased recognition and emphasis from the success of the US Armed Forces for the ability to efficiently and effectively distribute and store supplies and personnel (Lambert, Stock, & Ellram, 1998). Due to a trend of globalisation and fast evolution of technology in recent decade, the importance of logistics has been developed in a variety of fields. After all, logistics is very complex and significant to manage because it can lead to cost efficiency and increase customer satisfaction from the business perspective.

Several authors highlighted that the origin of the term is from the military logistics literature or business logistics environment (Rutner, Aviles, & Cox, 2012). On the other hand, Kent and Flint (1997) emphasised the evolution of logistics that falls into six eras. It is based on a brief review highlighting the concepts and milestone